

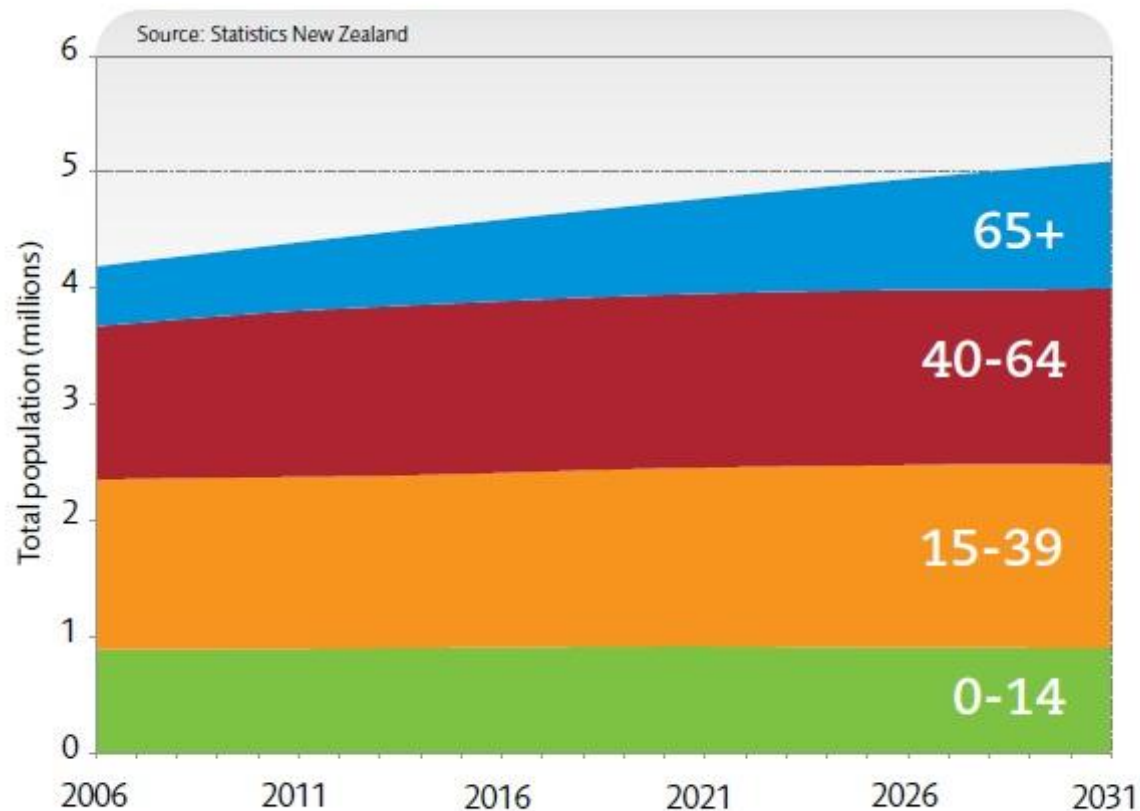
European transport policies for an ageing society
Brussels, Nov 7th 2013

Research on Transport Solutions for the Ageing Society – the New Zealand Example

Professor Simon Kingham
Department of Geography,
University of Canterbury - Te Whare Wānanga O Waitaha
Christchurch, New Zealand

The New Zealand context

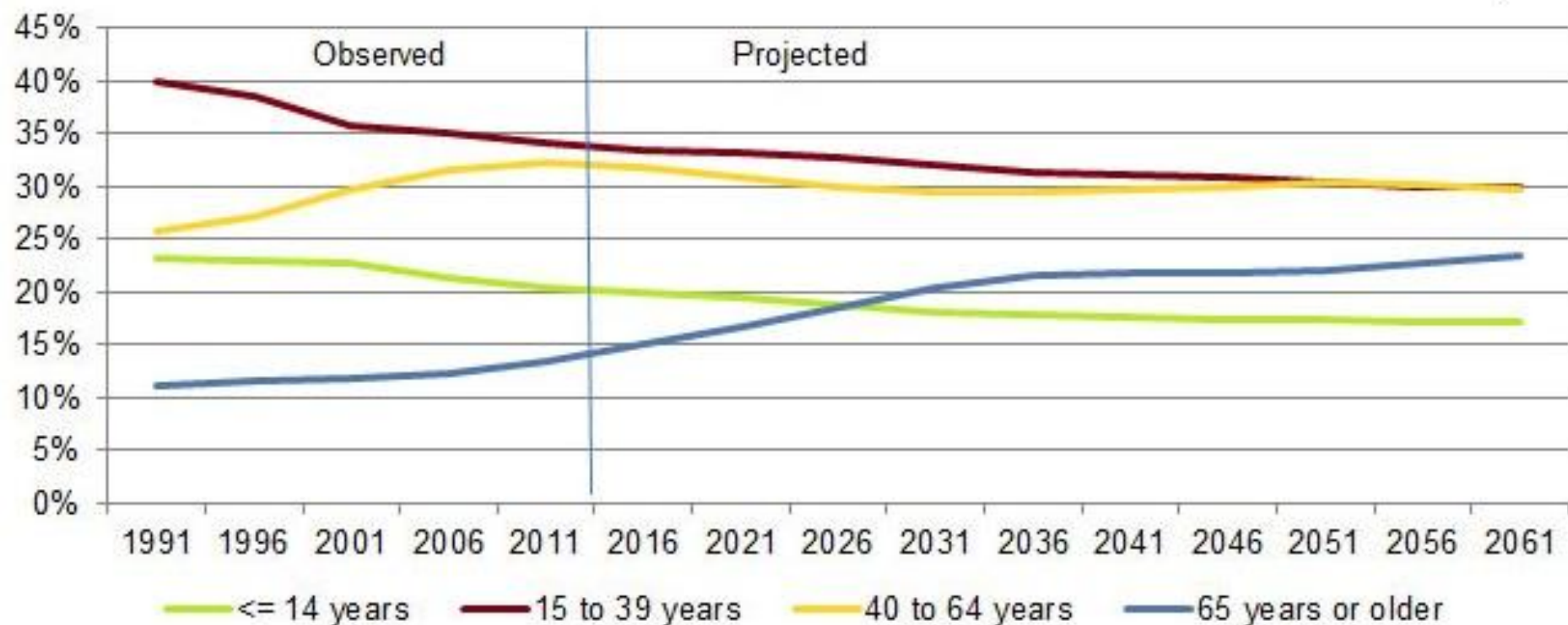
Figure 7 – New Zealand population projections by age until 2031 (millions)



Ministry of Transport, 2011, Connecting New Zealand. A summary of the government's policy direction for transport.

The New Zealand context

Figure 1: Population Estimates and Projections 1991-2061



Source: Statistics New Zealand. Projection Series 3 - Assumes medium fertility, high mortality and long-run annual net migration of 10,000

- Small population
- Low density
- Cities isolated from each other



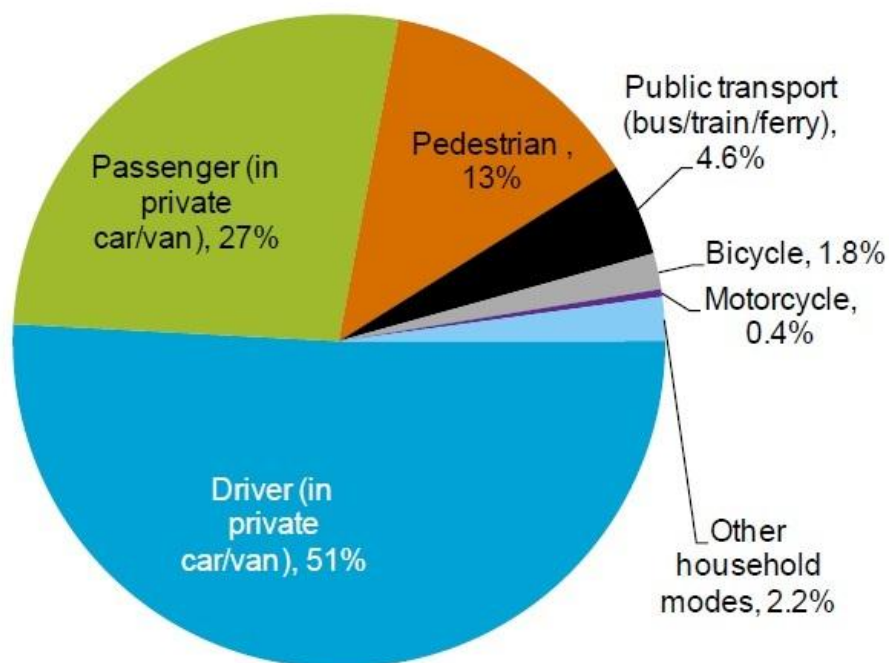
The New Zealand context

- Small population
- Low density
- Cities isolated from each other
- Significant reliance on agriculture especially dairying
- Strong domestic air industry
- Currently bulk of funding for roads
- Huge reliance on private motor vehicles

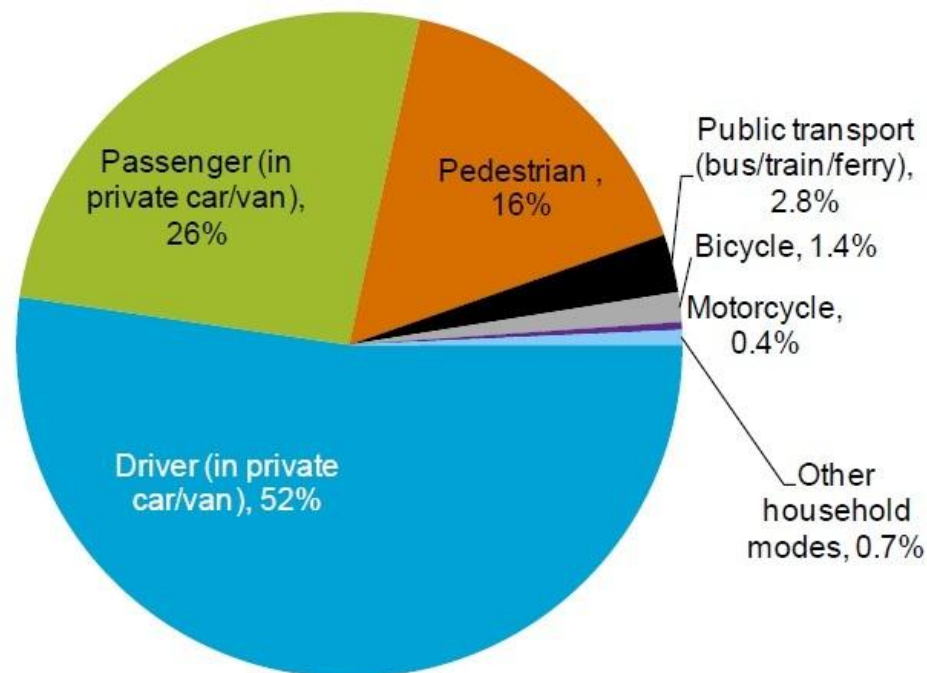
Mode share

Figure 1: Overall mode share

a) Share of total travel time



b) Share of trip legs



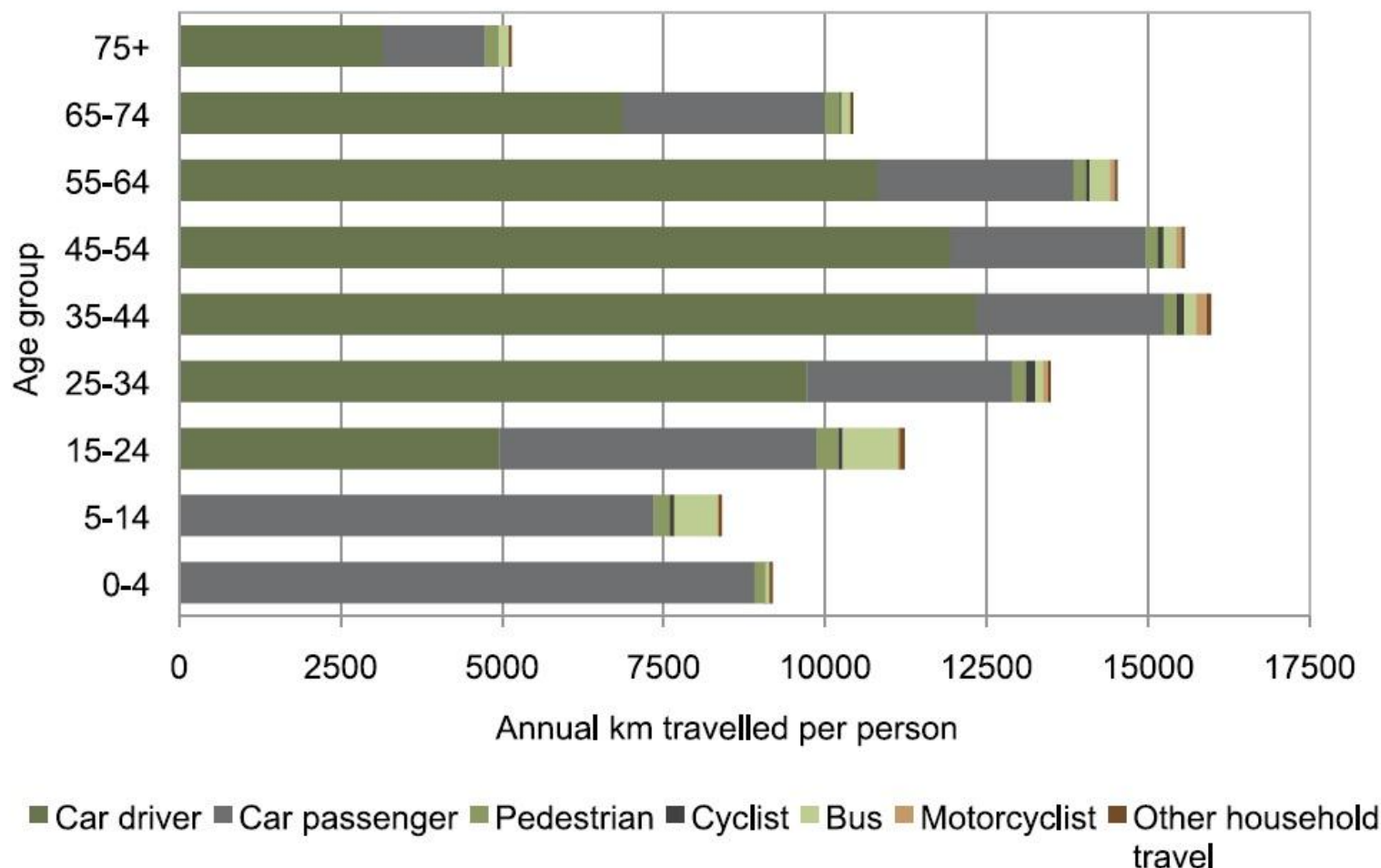
Ministry of Transport, 2012, Comparing travel modes.
Data from New Zealand Household Travel Survey 2008–2011

Public transport

- Rail in Auckland (1.4m) and Wellington (390,000)
- Bus in Christchurch (370,000), Hamilton (210,000), Dunedin (120,000), New Plymouth (53,000), Invercargill (50,000)
- Plus limited services elsewhere

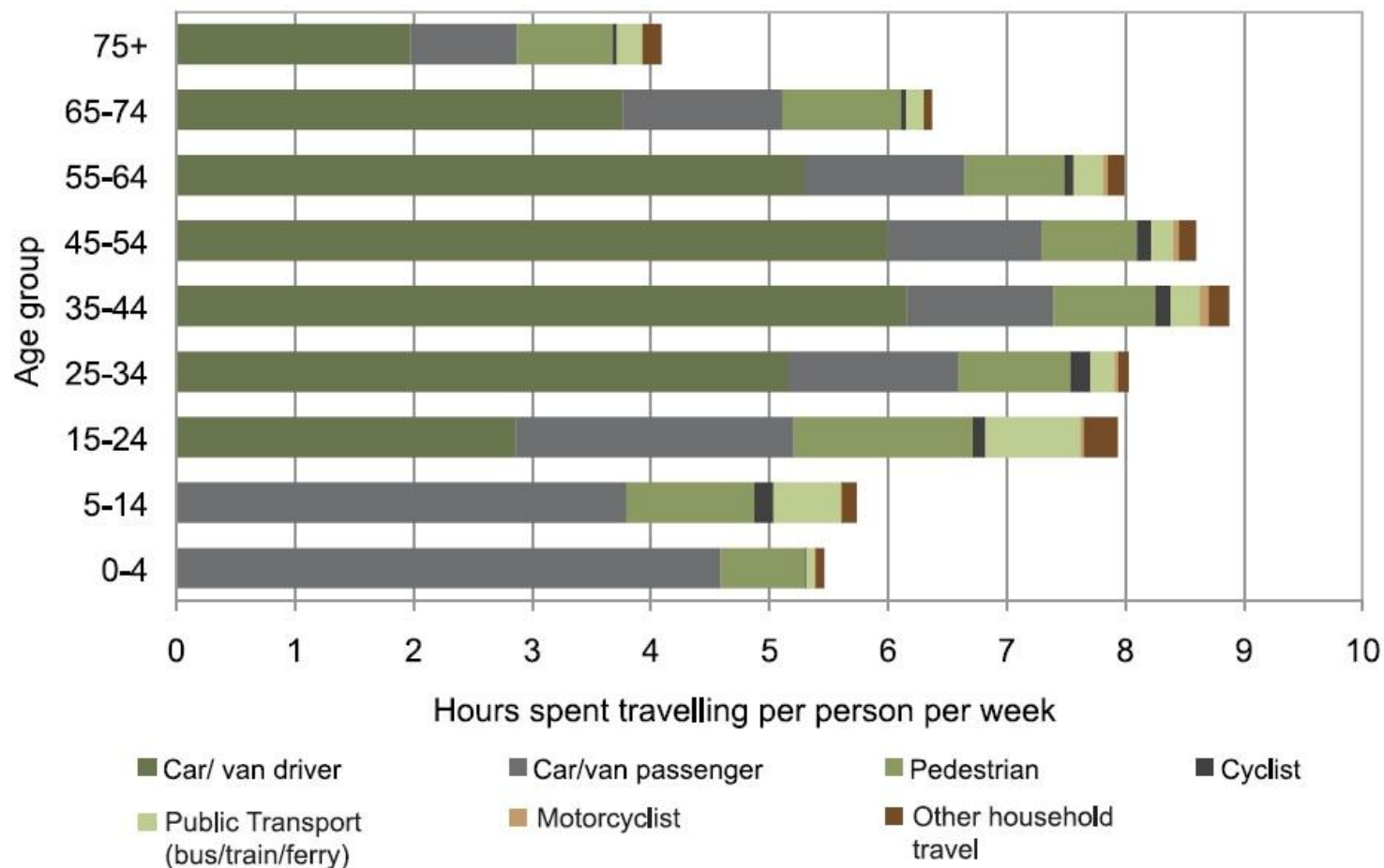
Older people's travel

Figure 2: Distance travelled per person, per year, by age group (2004-2008)



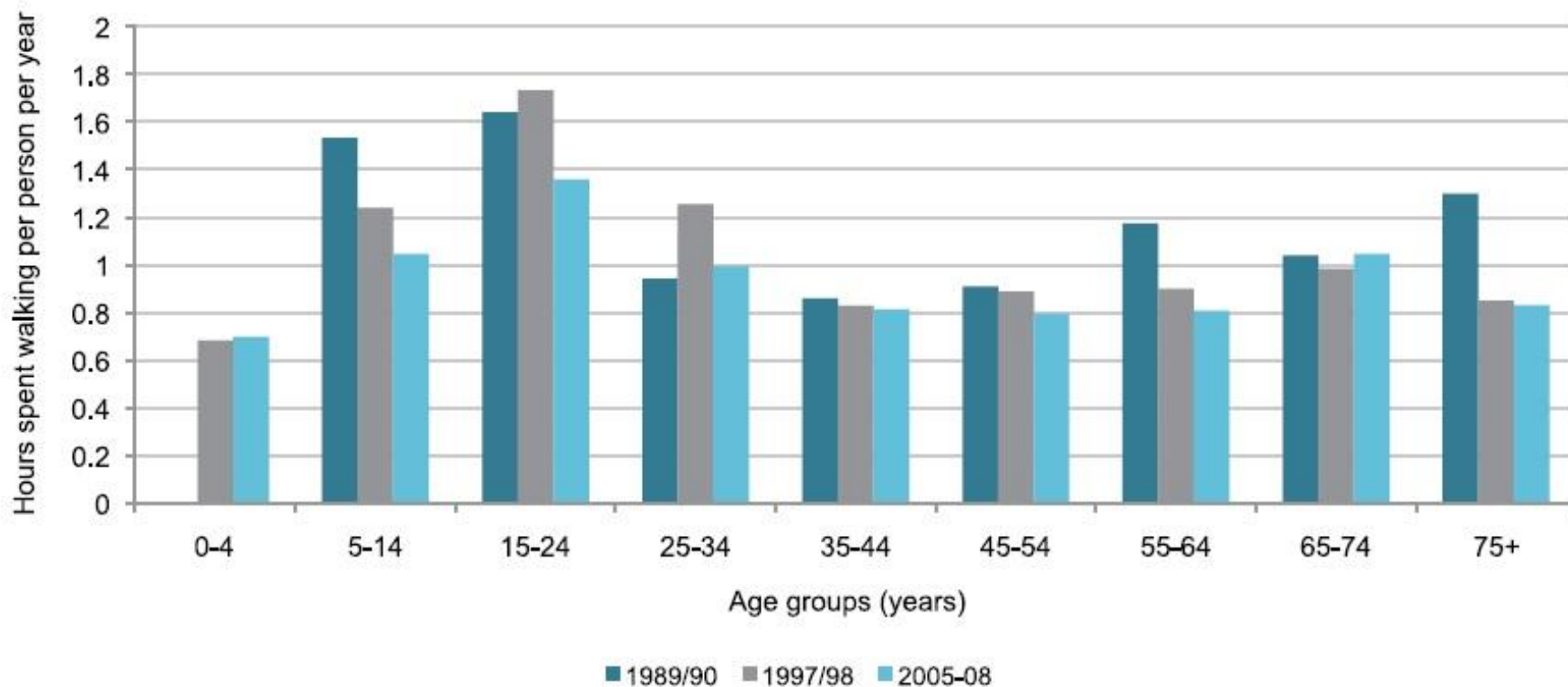
Older people's travel

Figure 3: Weekly time spent travelling, by age group (2004-2008)



Older people's travel

Figure 17: Historical time series of time spent walking per person per week



MoT, 2009, How New Zealanders Travel. Trends in New Zealand household travel 1989 - 2008

Challenges for transport in New Zealand

New Zealand is a trading nation, but geographically we are further away from the economic centres of the world than any other developed country. To be internationally competitive, we need to improve the efficiency of our transport networks. We need to achieve this at a time when:

- our population is ageing
- people are changing where they live in New Zealand
- fuel prices are expected to remain volatile while generally increasing
- the freight task is predicted to double in the next 30 years
- international responses to issues such as greenhouse gas emissions and transport security can impose additional transport costs on our exporters

Government's three key areas of focus for transport

To deliver on its transport objective, the government is focusing on three key areas.

Economic growth and productivity — transport has an important role to play in enabling the government's overall goal to grow the New Zealand economy to deliver greater prosperity, security and opportunities for all New Zealanders. The transport system provides connections — both domestically and internationally — for our communities and businesses, and meets the travel needs of our international tourists.

Value for money — improving the performance of the transport system is critical. The government needs to be confident that the transport sector (central and local government in particular) is delivering the right infrastructure and services to the right level, and for the best possible price.

Road safety — implementing the Safer Journeys road safety strategy and its new Safe System approach, so we have a sustained reduction in deaths and serious injuries on our roads over time.

Key government actions

The key government actions set out in *Connecting New Zealand* for the next decade are detailed below.

Road



- Invest \$36 billion in land transport over the next decade via the National Land Transport Fund. This includes \$19.5 billion in State highways and \$12.5 billion in subsidies for regional and local roads and public transport.
- Complete the first set of Roads of National Significance (RoNS).
- Drive greater performance and value for money from the NZ Transport Agency (NZTA).
- Continued reduction in emissions of carbon dioxide from land transport over time.

Maritime



- Focus on port productivity.
- Drive greater performance and value for money from Maritime New Zealand.
- Establish a sustainable funding basis for Maritime New Zealand.
- Improve maritime safety, by introducing a new seafarer qualifications and operational limits framework, and a new maritime operator safety system.
- Improve public information on the performance of maritime and freight transport.

Aviation



- Negotiate air services agreements to provide more access to key trade and tourist markets.
- Improve safety regulation in key areas, including adventure and agricultural aviation.
- Develop and promulgate a national airspace policy, and an airspace and air navigation plan.
- Drive greater performance and value for money from the Civil Aviation Authority and the Aviation Security Service.
- Review any market barriers to trade.

Road safety



Implement the new Safe System approach, including:

- increasing the safety of young drivers
- reducing the impact of alcohol and drug-impaired drivers
- improving the safety of our roads and roadsides
- increasing the safety of motorcycling
- helping people drive to the conditions and encouraging them to comply with safe speed limits

Rail



- Make progress on the implementation of the *KiwiRail Turnaround Plan*.
- Complete \$2.3 billion investment in metro rail infrastructure in Auckland and Wellington.

Public transport



- Improve efficiency in the operation of the public transport system.
- Grow public transport patronage with less reliance on subsidies.

Ministry of Transport,
2011, *Connecting New Zealand*. A summary of the government's policy direction for transport.

New Zealand Positive Ageing Strategy (2001)

4. Transport

Goal:

Affordable and accessible transport options for older people

Objectives:

4.1 Review public transport options so that they are accessible and user-friendly in terms of safety, routes, timetables and affordability

4.2 Promote driver education and safety programmes for older road users

4.3 Work towards reducing transport related barriers to accessing health and community services

4.4 Monitor trends, including re-licensing rates, crash statistics and on-road test referrals for older drivers

• Ministry of Social Development, 2008, Positive Ageing Goals and Objectives - as at May 2008.
<http://www.msd.govt.nz/about-msd-and-our-work/publications-resources/planning-strategy/positive-ageing/goals-and-objectives-may-2008.html>

Ministry of Transport

3

Keeping moving
– by car

6

Prolonging your
driving career

17

Renewing your
driver licence from
75 years onwards

24

Life beyond driving

26

Keeping moving
– by public
transport

27

Keeping moving
– on foot

28

Keeping moving
– by bike

29

Keeping moving
– by mobility
scooter

30

Finding out about
alternative
transport schemes

31

Resources and
contacts

Licensing and Age

- 10 year licences
 - Eyesight check
 - Medical if needed
- Age 75 +
 - Eyesight check
 - 2-5 years licence
 - Compulsory medical certificate
 - 30-minute On-road Safety Test (if Doctor recommended)

SuperGold Card

- Since April 2008
- Card holders (over 65) provided with free off-peak travel on urban public transport (buses, trains and harbour ferries).
 - Weekdays: 9am-3pm and after 6.30pm
 - Weekend and holidays: all day
- Annual cost to govt = \$22m
- Estimated benefit: cost ratio of 4:1
 - McDermott Miller Limited, 2010, Free Public Transport Travel Scheme: Social and Economic benefits to users and the wider economy. Report for NZTA.

Total Mobility Scheme

- Taxi services for people “*who cannot travel independently in a safe and dignified manner for part of their intended journey*”
 - 50% discount taxi vouchers
- Funding to help buy & install wheelchair hoists in taxi vans.

Low cost innovative solutions

- Low population, low density, dispersed urban areas
- Low tax revenue!
- Need for low cost solutions

Community Vehicle Trusts

- Rural communities and small towns
- Community owned vehicles with Volunteer drivers
- Set up costs & fixed annual costs by local govt or Trust
- On demand travel service
- Largely used by the elderly
 - *“By providing transport options to elderly people or the disabled for example it often enables them to stay in their homes in their own community. This in turns helps the sustainability of the local infrastructure such as medical services and supermarkets so keeps rural areas and small town viable and thriving”*

The great opportunity

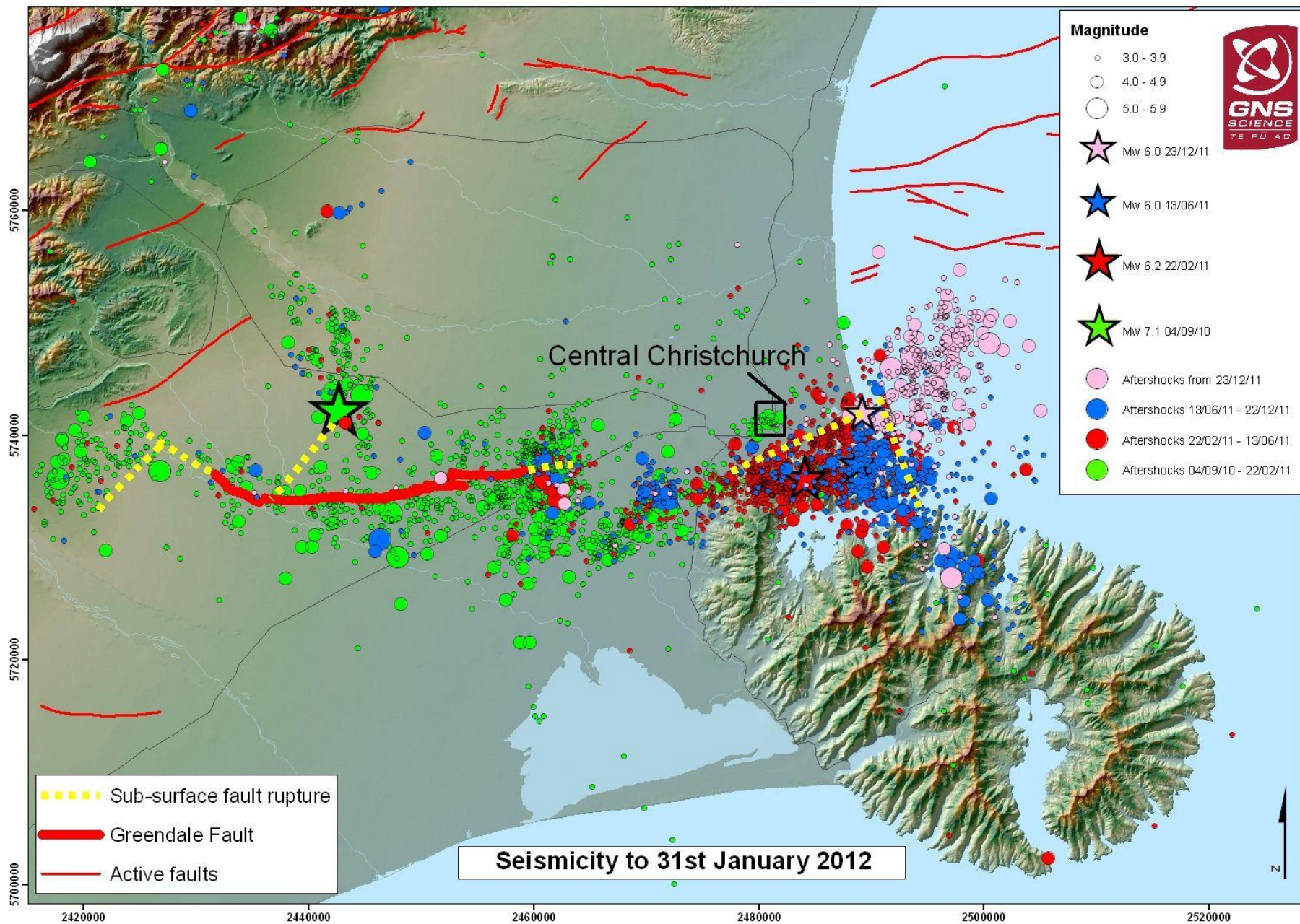
- Christchurch

Christchurch pre-earthquake

- Struggling central city & thriving malls
- Car-centric
 - Very high rates of parking provision
- Reasonably well patronised PT
 - relative to NZ & Aus, but poor compared to rest of world
- Reasonable cycling rates
 - but limited separated infrastructure and only confident cyclists
- Few transport choices for *ageing population*

Earthquakes!

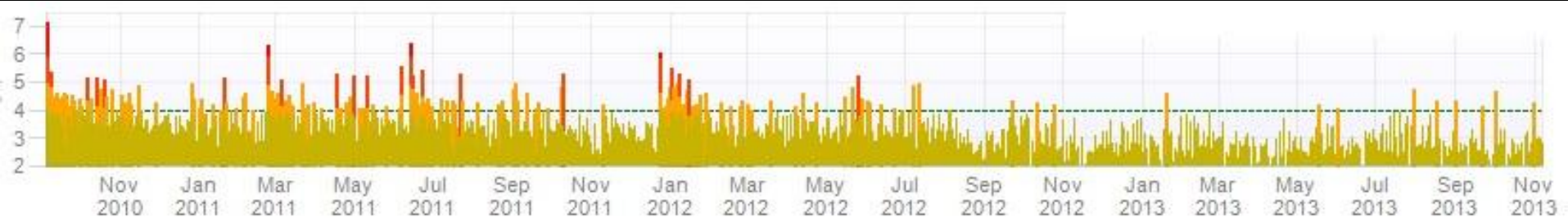
- Major earthquakes in and around Christchurch, New Zealand, since September 2010
- Ongoing aftershocks



Source: www.geonet.org.nz

Earthquakes over the Canterbury Area from 1900 to Today





Mag	Last	Shakes
7	04 Sep 2010 4:35am	1
6	23 Dec 2011 3:18pm	3
5	25 May 2012 2:44pm	57
4	31 Oct 2013 4:21am	475
3	31 Oct 2013 5:51am	3770
2	07 Nov 2013 4:19am	9329

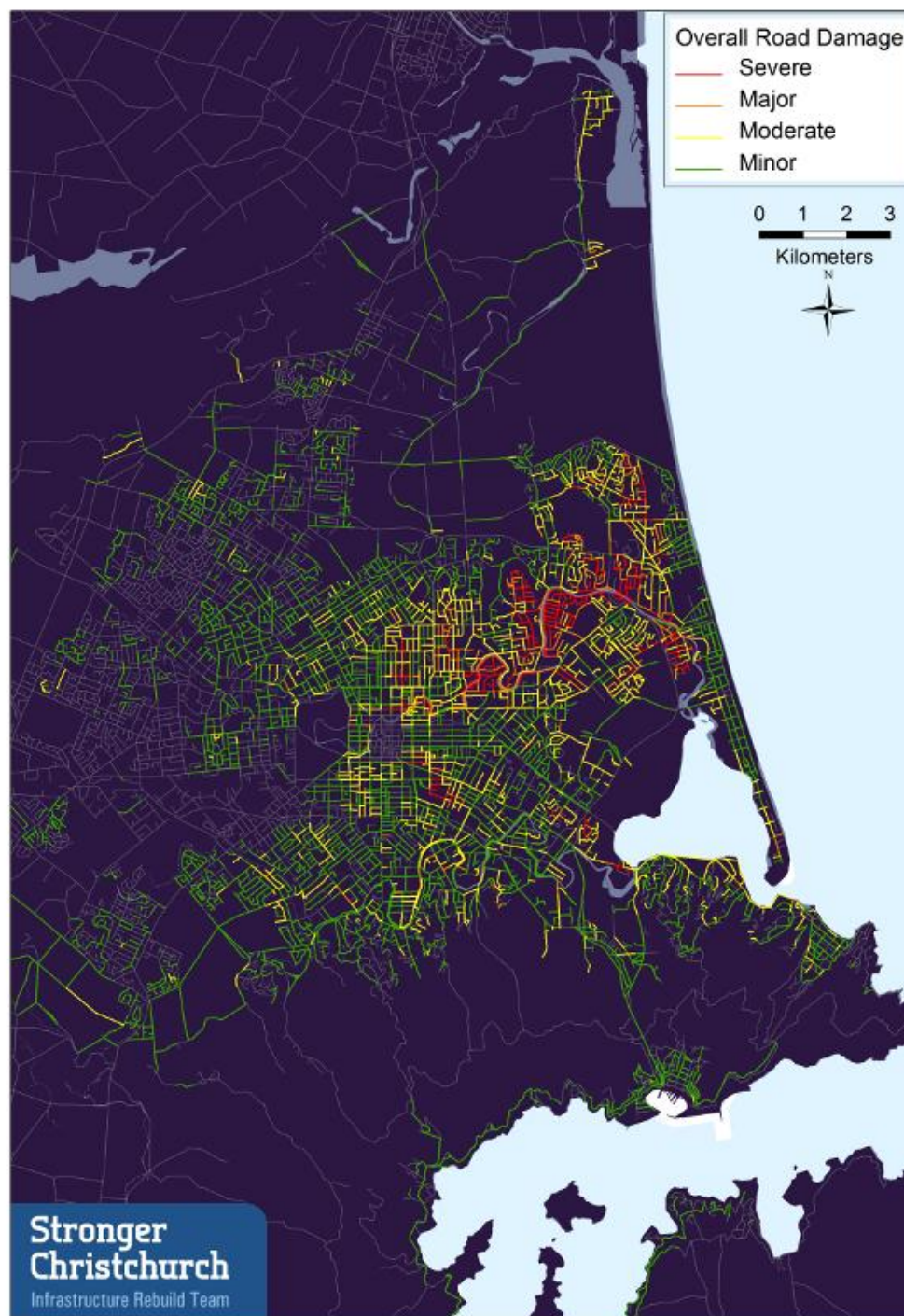
Source: www.canterburyquakelive.co.nz

Background

- Major damage
 - 70% of city centre to be demolished



- 15,000-20,000 residential properties to be rebuilt
- Over 100,000 properties to be repaired
- 45% of Christchurch's roads need rebuilding – 895 kms



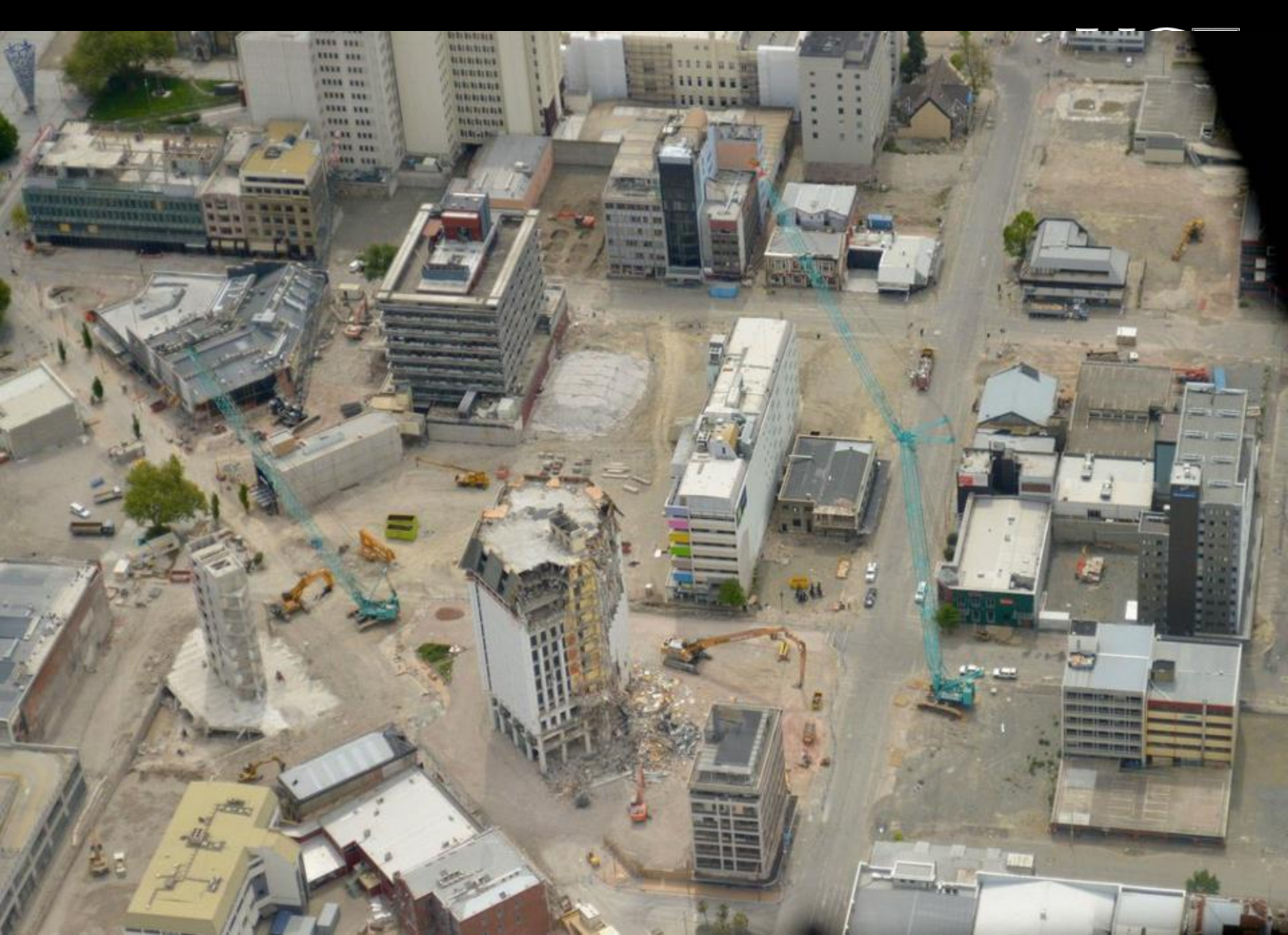




Photo by Debbie Franks

Opportunity

- Golden opportunity to rebuild Christchurch as a *transport-choice* city
- \$40bn spending
- Key is:
 - Realistic and genuine choices
 - Accessible options

Plans

- *Share an Idea* (CCC), April-June 2011
- Draft Central City Plan (CCC), Aug-Dec 2011
 - Central City Recovery Plan (CCDU), Aug 2012
- Christchurch Transport Plan 2012-42 (CCC), June 2012
- Christchurch Central Recovery Plan: An Accessible City (CCDU), October 2013

Share An Idea – 106,000 ideas

share
an idea
shareanidea.org.nz

Christchurch
City Council



Central
City Plan



CERA



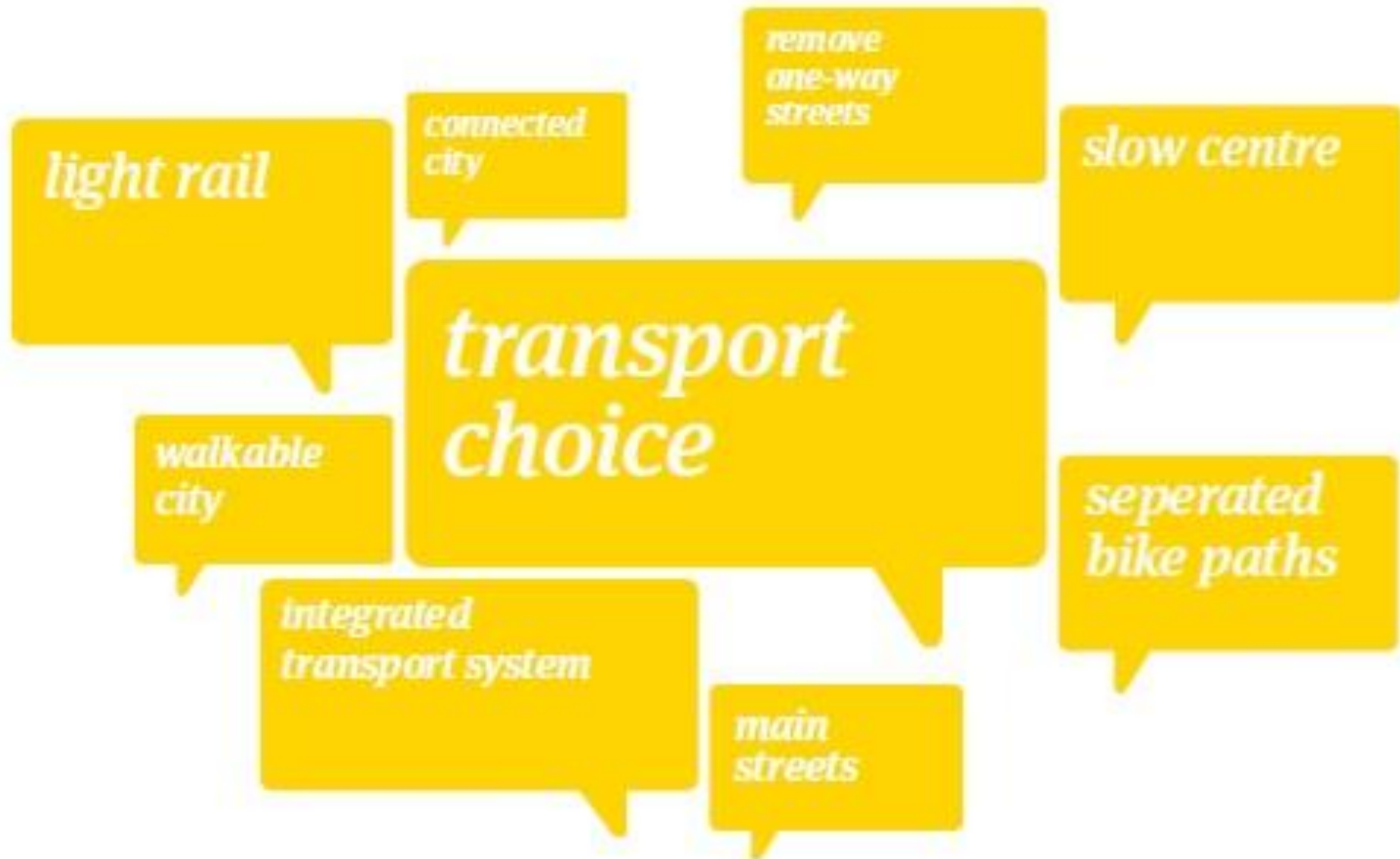
Te Kaitiaki Māori

Environment
Canterbury
Regional Council
Te Kaitiaki Māori

Share An Idea



Share An Idea



CCC Draft Central City Plan

CCDU Central City Recovery Plan

Transport choice

Throughout the Central City Plan, the aim is to create a safer, more pleasant environment in which people can walk, cycle, drive and, more importantly, meet, play and take time to enjoy the array of activities on offer.

This will be achieved by providing a range of Central City street environments which offer choice for people to move about in the Central City. Some streets will give priority to walking and cycling, others to public transport, and others to cars and service vehicles.

The Avenues (Bealey, Fitzgerald, Moorhouse, Deans and Harper) will be redesigned to provide an efficient orbital route for vehicles and cyclists, reducing the need for vehicles to travel through the Central City. The one-way streets will be converted to two-way, with clear access from the Avenues to key destinations within the Central City. Traffic will be slowed in the Compact CBD and along the main streets within the Central City, recognising that the core of the city is for people and activities.

New street designs will allow people to choose their preferred mode of transport and enjoy this people-friendly environment. These will take into consideration the city's ageing population and ensure the streets are accessible for everyone, including those who have limited mobility. The Central City's transport system will evolve as the area is redeveloped and the way people use the Central City changes.

The streets in the Compact CBD will be redesigned and integrated into redeveloped areas, to showcase how the Central City can evolve. The early development of a Central City Streetscape Plan will guide street and intersection upgrades. The basis of this will be slowing traffic on streets at the core of the city to no more than 30 km/h, as well as maximising safety and amenity for people walking, cycling, using public transport and for people with limited mobility throughout the Central City.

Intersection changes will be made which improve walking and cycling amenity and safety. Street upgrades will incorporate better surfaces, seating, street furniture, and, where appropriate, adopt new technologies and design for lighting. The street enhancements will include wider, continuous footpaths, street trees, parking and the removal of unnecessary traffic controls and signage.

A Travel Demand Management programme will support businesses and retailers to plan for safe and sustainable transport choices as the city recovers.

"Fully integrated, multi-modal transport system which offers choices of travel mode."

Share an idea, Community Expo



Christchurch Transport Plan 2012-42

The four goals

Four goals have been identified which will help to achieve the vision of the draft Christchurch Transport Plan.

Goal 1.

Improve access and choice

by delivering resilient transport networks with an emphasis on efficient road use, cycling, public transport and walking. Key to this goal is introducing a new road classification which will guide the design and management of streets to reflect the local environment and place emphasis on balancing both people and vehicle movement. The goal supports the development of a safe cycle network, to make it easier for Christchurch residents to cycle. This will include creating shared footpaths, developing dedicated major cycleways and key flagship cycleways that will support Christchurch to become a cycle city.



Goal 2.

Create safe, healthy and liveable communities

highlights transport's role in supporting the recovery of the Central City, suburban centres and new growth areas. The integration of land use and transport planning will also be strengthened through District Plan changes. The goal supports a safer systems approach to improve the safety of the entire transport system.



Goal 3.

Support economic vitality

by developing local freight routes to improve access to the Christchurch International Airport, Lyttelton Port and freight hubs. Parking and congestion management will support the growth of commercial centres.



Goal 4.

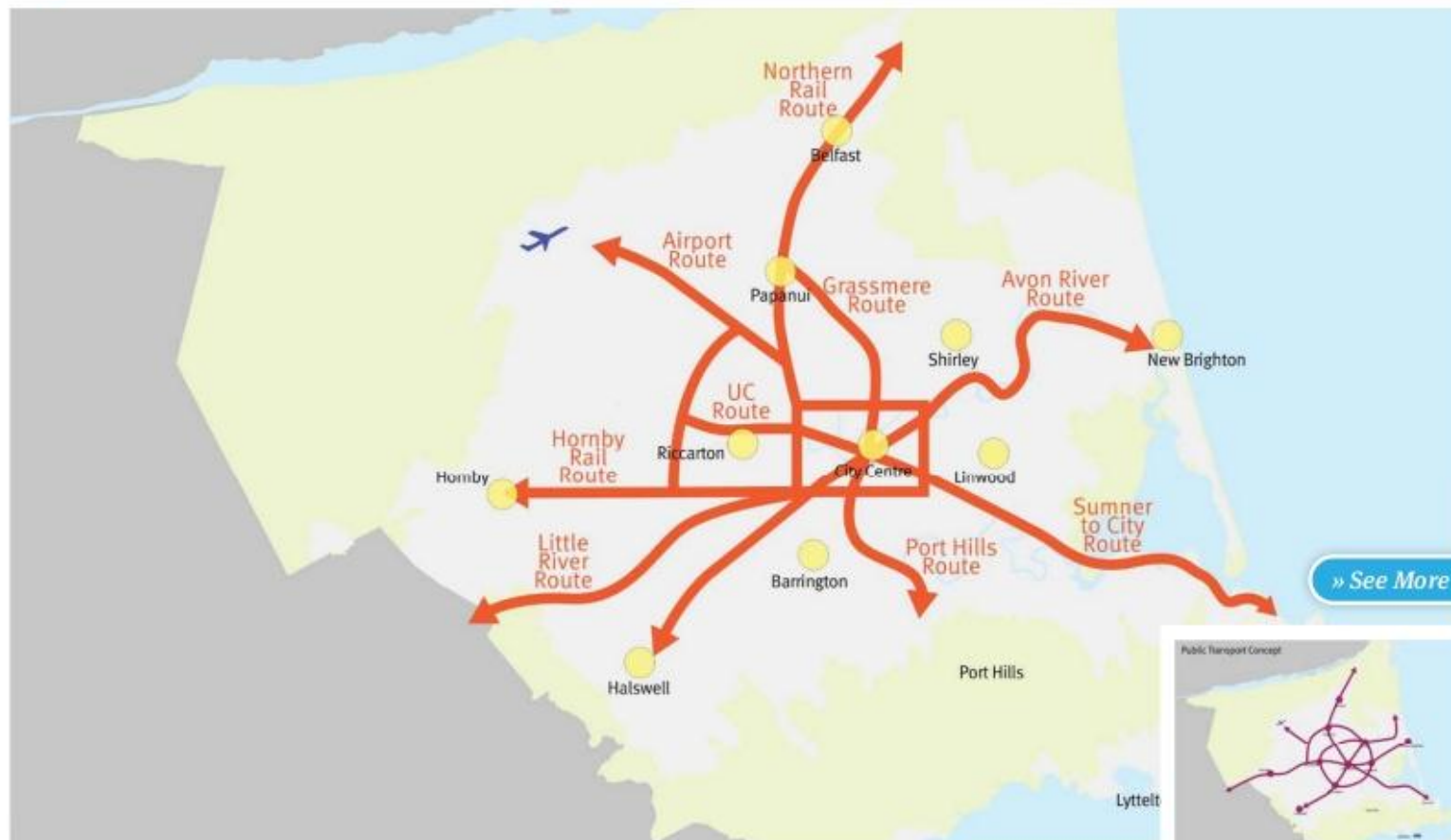
Create opportunities for environment enhancements

by building green infrastructure and adapting the network for climate change and peak oil, investing in new technology and infrastructure enhancements.

Christchurch Transport Plan 2012-42

Cycle network

- » Creating exemplary cycle routes that are separated from vehicles.
- » Making Christchurch the cycling city.



Public Transport

Christchurch Transport Plan 2012-42

Cycle network

- » Creating exemplary cycle routes that are separated from vehicles.
- » Making Christchurch the cycling city.



Cycle Network

Christchurch Transport Plan 2012-42

Getting there

Now

Repair and rebuild the transport infrastructure, keep our economy going by improving freight and strategic road network.

Soon

Improve the transport choices, invest in efficient public transport network and create continuous cycle routes.

Later

Creating vibrant centres which attract people and businesses and are connected by good transport choices.



Christchurch Central Recovery Plan: An Accessible City , October 2013

The buildings, open spaces, streets and facilities within the central city will be safe, accessible and people friendly.

A more accessible and safer built environment will benefit everyone. It will become more accessible to not just disabled people, but also older people, those with young children, and people with temporary mobility issues. A more accessible city will also offer accessible tourism opportunities.

An Accessible City: road hierarchy

Central city road use hierarchy

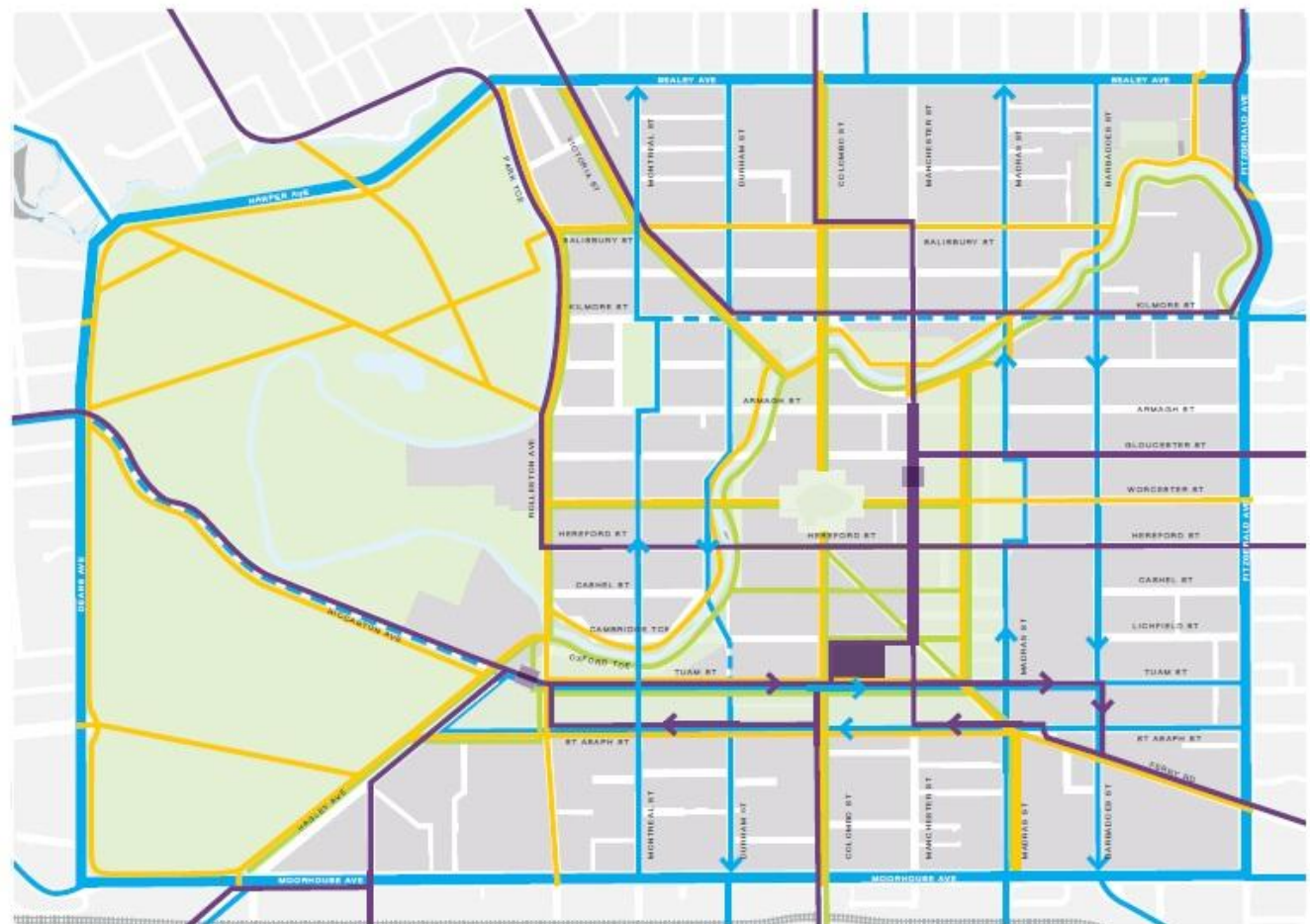


Diagram shows prioritised routes for different travel modes

An Accessible City: Speed

Central Christchurch speed zones



Maximum speeds

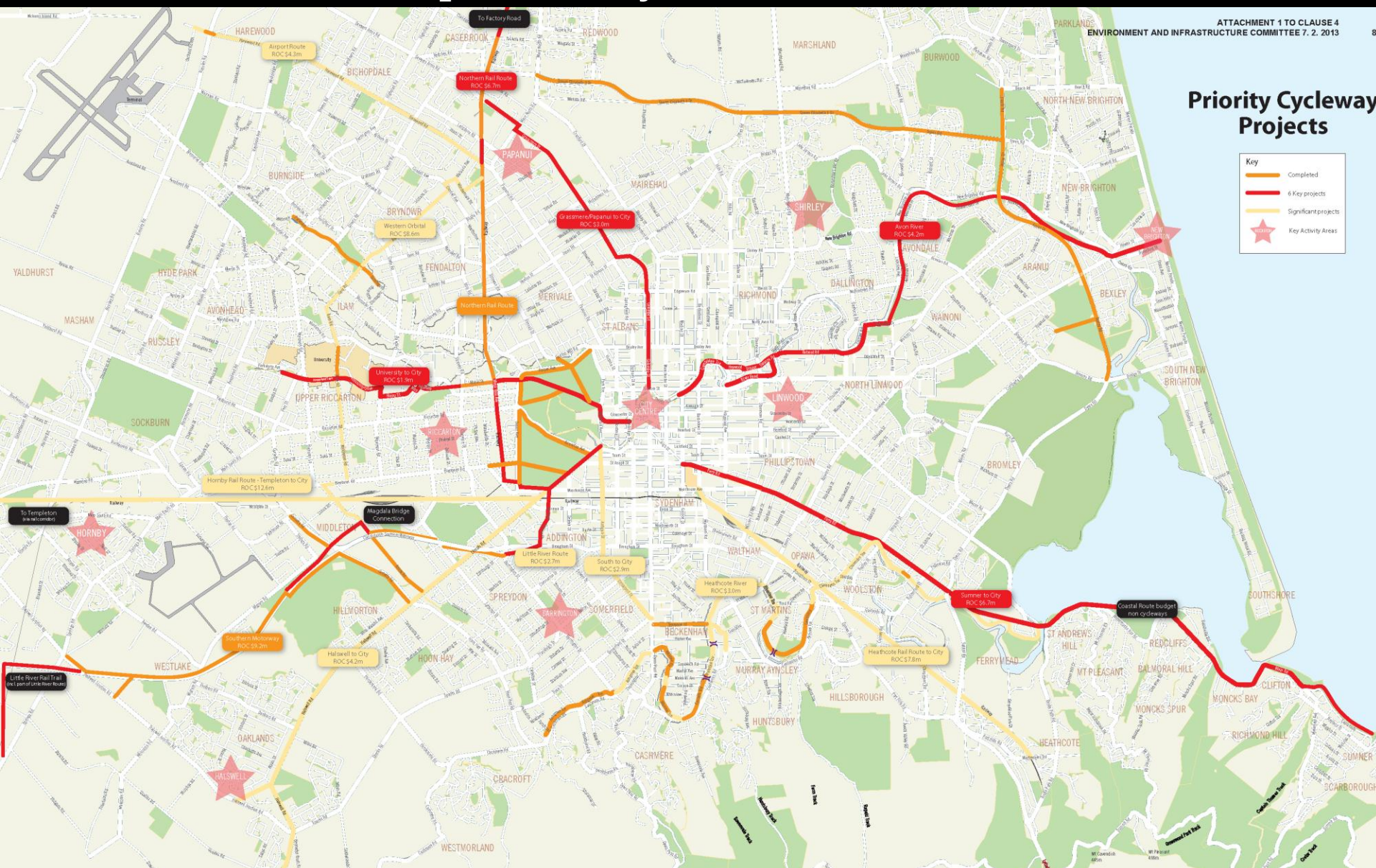
Inner zone - maximum 30km/hr (including main streets) Outer zone - maximum 50km/hr Core

12 New, Safe, Separated Cycle Routes

ATTACHMENT 1 TO CLAUSE 4
ENVIRONMENT AND INFRASTRUCTURE COMMITTEE 7. 2. 2013

Priority Cycleway Projects

Key
— Completed
— 6 Key projects
— Significant projects
★ Key Activity Areas



But.....

- Money!
 - \$12.3bn central government funding package (2012-15)
 - Mostly roads especially new state highways
 - 0.43% for walking & cycling

“this means the funding available for public transport, cycling and walking networks ... will be heavily constrained for much of the early recovery period”

Christchurch Transport Plan

- 12 routes @ \$70m committed by City Council

So what will we see in Christchurch?



What do older people *want/need* e.g. cycling?

Combined Age 136 years



Home

Dinner



Celebrating a 45th Wedding Anniversary

What do older people *want/need* e.g. cycling?

Like Noel Newton. Noel lives in Toowoomba, Australia, on the east coast — not that far from Brisbane, if you know where that is. Noel is 81, and most days he goes out for a bike ride. Generally, he'll go about 30 miles. Why does he do it? Here's what **he told the *Chronicle***:



Heather Halcrow Nicholson · University of Auckland, NZ

I am glad you had a good day out. Bicycles have many virtues, but are not much use to many of us over 70 or 80 years of age. It is often too painful for me to walk more than a few metres because of an injury to my back about 70 years' ago. We have a very fine walkway nearby but many of us don't use it because speeding cyclists of all ages fail to warn the walkers they are about to swoop by. There is an element of sanctimony among some cyclists so that they imagine they are so virtuous that they have a right to upset and frighten others.

Buses? They can be just too difficult for a range of reasons, and we often need to drive our cars or be driven by a friend or relative.

Reply · 👍 1 · Like · Follow Post · October 1 at 5:20pm

In Summary

- Transport choices are key
 - Reduce reliance on car based modes, provide options
- Some good low cost solutions
- Christchurch - a golden opportunity